

## **REMARKS/ARGUMENTS**

The Applicants originally submitted Claims 1-20 in the application. In the present response, the Applicants have amended Claims 1, 8 and 15. No claims have been canceled or added. Accordingly, Claims 1-20 are currently pending in the application.

### **I. Rejection of Claims 1, 4-6 and 8-13 under 35 U.S.C. §103**

The Examiner has rejected Claims 1, 4-6 and 8-13 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,141,390 to Cova in view of U.S. Patent No. 6,275,685 to Wessel, *et al.* The Applicants respectfully disagree.

Cova is directed to linear transmitters using predistortion. (*See* column 1, lines 19-20.) Cova does not teach or suggest, however, employing a receive chain of a WCDMA transceiver during a training mode to provide a digital compensation signal that is a function of an output of a transmit chain as recited in independent Claims 1 and 8. Instead, Cova teaches a transmitter 400 that receives digital data and transmits an amplified signal originating from the digital data through an antenna 105. (*See* column 4, lines 60-63, column 6, lines 18-22 and Figure 4.) From the amplified signal that is transmitted, a signal is provided to a trainer 431. (*See* column 6, lines 31-35, lines 58-66 and Figure 4.) Thus, Cova teaches a trainer that employs a signal that is a function of a transmitted signal during showtime but does not teach or suggest a predistortion training circuit that employs a receive chain during a training mode to provide a signal. In fact, the Applicants do not find where Cova discloses a training mode.

The Examiner asserts that Cova suggests a training mode since the trainer subsystem of Figure 6 periodically receives batches of data. (*See* Examiner's Action, page 5.) The batches of

data, however, are from the output of the power amplifier during transmission. (See column 10, lines 31-32 and lines 41-47, column 9, lines 9-11 and column 6, lines 18-21 and lines 28-35.) In other words, data is being transmitted through the antenna. Thus, Cova does not teach or suggest a training mode as presently claimed wherein the antenna is disconnected from a transmit chain as defined in the specification. (See specification, paragraph 32.)

Wessel does not cure the above deficiency of Cova. Wessel is directed to high power linear amplifiers that use digital predistortion. (See column 1, lines 4-6.) The Applicants do not find, however, where Wessel employs a receive chain during a training mode to provide a digital compensation signal that is a function of an output of a transmit chain as recited in independent Claims 1 and 8. In fact, the Applicants do not find where Wessel even teaches or suggests employing a receive chain to provide a digital compensation signal as recited in Claims 1 and 8. Instead, Wessel teaches using a dedicated feedback path to provide a sample of a transmitted amplified output signal 28. (See column 6, lines 34-41 and Figure 4.) Wessel, therefore, does not cure the deficiencies of Cova.

Since Cova and Wessel, individually or in combination, fail to teach or suggest each element of independent Claims 1 and 8, the combination of Cova and Wessel does not provide a *prima facie* case of obviousness of Claims 1 and 8 and Claims dependent thereon. Accordingly, the Applicants respectfully request the Examiner to withdraw the §103(a) rejection of Claims 1, 4-6 and 8-13 and allow issuance thereof.

## **II. Rejection of Claims 2, 3, 7 and 14 under 35 U.S.C. §103**

The Examiner has rejected Claims 2, 3, 7 and 14 under 35 U.S.C. §103(a) as being unpatentable over Cova and Wessel and in further view of either U.S. Patent No. 6,373,902 to Park, *et al.* (Claim 2), U.S. Patent No. 6,240,144 to Ha (Claim 3) or U.S. Patent No. 6,288,610 to Miyashita (Claims 7 and 14). The Applicants respectfully disagree.

The Applicants do not find where Park, Ha or Miyashita teach or suggest employing a receive chain of a WCDMA transceiver during a training mode to provide a digital compensation signal that is a function of an output of a transmit chain as recited in independent Claims 1 and 8. Furthermore, neither Park, Ha nor Miyashita has been cited to cure the above deficiency of Cova and Wessel but to teach the subject matter of the above designated dependent Claims 2-3, 7 and 14. Accordingly, the cited combinations of Cova, Wessel, Park, Ha and Miyashita fail to teach or suggest each element of independent Claims 1 and 8, and do not provide a *prima facie* case of obviousness of Claims 2-3, 7 and 14 which depend thereon. The Applicants, therefore, respectfully request the Examiner to withdraw the §103(a) rejection of Claims 2-3, 7 and 14 and allow issuance thereof.

## **III. Rejection of Claims 15-20 under 35 U.S.C. §103**

The Examiner has rejected Claims 15-20 under 35 U.S.C. §103(a) as being unpatentable over Cova and Wessel in further view of Park and Ha. The Applicants respectfully disagree.

As discussed above, the Applicants do not find in Cova, Wessel, Park or Ha, a teaching or suggestion of employing a receive chain of a WCDMA transceiver during a training mode to provide a digital compensation signal that is a function of an output of a transmit chain as recited in independent Claim 15. Accordingly, the cited combination of Cova, Wessel, Park and Ha fails to

teach or suggest each element of independent Claim 15, and does not provide a *prima facie* case of obviousness of Claim 15 and Claims 16-20 which depend thereon. The Applicants, therefore, respectfully request the Examiner to withdraw the §103(a) rejection of Claims 15-20 and allow issuance thereof.

#### **IV. Comment on References Cited**

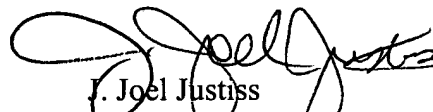
The Applicants reserve further review of the references cited but not relied upon if relied upon in the future.

#### **V. Conclusion**

In view of the foregoing amendment and remarks, the Applicants now see all of the Claims currently pending in this application to be in condition for allowance and therefore earnestly solicit a Notice of Allowance for Claims 1-20.

The Applicants request the Examiner to telephone the undersigned attorney of record at (972) 480-8800 if such would further or expedite the prosecution of the present application.

Respectfully submitted,  
HITT GAINES, PC

  
J. Joel Justiss  
Registration No. 48,981

Dated: 2/29/05  
P.O. Box 832570  
Richardson, Texas 75083  
(972) 480-8800